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**Notice of Allowability**

Application No.

09/608,620

Examiner

Herng-der Day

Applicant(s)

BLUME ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendments received 8/30/04 and 4/12/05.
2. ☒ The allowed claim(s) is/are 1-17 and 19-27, now renumbered as 1-26.
3. ☐ The drawings filed on \_\_\_\_\_ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All   b) ☐ Some\*   c) ☐ None   of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☒ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☒ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☒ to Paper No./Mail Date 12/4/03.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date 04122005.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

*Thay Phan*  
Thai Phan  
Patent Examiner  
AU: 2128

### **DETAILED ACTION**

1. This communication is in response to Applicants' Response to Office Action dated May 21, 2004, mailed August 27, 2004, received by PTO August 30, 2004, and Applicants' Supplemental Amendment faxed April 12, 2005.

1-1. Claims 1, 11, 12, 17, 19, 24, and 25 have been amended. Claim 18 has been cancelled.

Claims 1-17 and 19-27 are pending.

1-2. Claims 1-17 and 19-27 have been examined and allowed.

### ***Reasons for Allowance***

2. The following is an Examiner's statement of reasons for allowance:

2-1. The closest prior art of record discloses:

(1) A method for designing a spline coupling (Chetta et al., U.S. Patent 6,587,741 B1).

(2) A method for optimizing the design using knowledge-based engineering techniques (Kaepp, U.S. Patent 5,799,293);

(3) A gas turbine jet engine (Burkhardt, U.S. Patent 4,841,726).

2-2. Independent claim 1 is directed at a computer implemented method of designing an engine case static structure of a gas turbine engine. Although applying knowledge base of information having a plurality of design rule in product design is obvious as shown in Chetta's U.S. Patent 6,587,741, this independent claim identifies the distinct feature of "an engine case static structure knowledge base of information having a plurality of design rule signals with respect to a corresponding plurality of parameter signals of associated elements of an engine case

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static structure, wherein the engine case static structure knowledge base comprises a data value signal for each one of the plurality of design rule signals”.

Because the closest prior art does not teach or suggest an engine case static structure knowledge base, claim 1 is deemed allowable.

Dependent claims 2-16 are allowable as they depend on the allowed independent claim 1.

**2-3.** Independent claim 17 is directed at a computer implemented method of designing an engine case static structure for a gas turbine engine. Although applying knowledge base of information having a plurality of design rule in product design is obvious as shown in Chetta’s U.S. Patent 6,587,741, this independent claim identifies the distinct feature of “an engine case static structure knowledge base storing a plurality of engine case static structure design parameter signals corresponding to a plurality of design rule signals, wherein the engine case static structure knowledge base includes a design parameter signal for each of the design rule signals”.

Because the closest prior art does not teach or suggest an engine case static structure knowledge base, claim 17 is deemed allowable.

Dependent claims 19-20 are allowable as they depend on the allowed independent claim 17.

**2-4.** Independent claim 21 is directed at a computerized system for designing an engine case static structure of a gas turbine engine. Although applying knowledge base of information having a plurality of design rule in product design is obvious as shown in Chetta’s U.S. Patent 6,587,741, this independent claim identifies the distinct feature of “an engine case static structure knowledge base for storing a plurality of engine case static structure design parameter signals

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corresponding to a plurality of design rule signals for creating a geometric representation of an engine case static structure”.

Because the closest prior art does not teach or suggest an engine case static structure knowledge base, claim 21 is deemed allowable.

2-5. Independent claim 22 is directed at a computerized system for designing an engine case static structure of a gas turbine engine. Although applying knowledge base of information having a plurality of design rule in product design is obvious as shown in Chetta’s U.S. Patent 6,587,741, this independent claim identifies the distinct feature of “an engine case static structure knowledge base including a plurality of design rule signals for generating signals representing an engine case static structure model, wherein each of the design rule signals has a first relationship with a design parameter signal”.

Because the closest prior art does not teach or suggest an engine case static structure knowledge base, claim 22 is deemed allowable.

Dependent claims 23-27 are allowable as they depend on the allowed independent claim 22.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

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***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Herng-der Day whose telephone number is (571) 272-3777. The Examiner can normally be reached on 9:00 - 17:30. Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2100 Group receptionist: (571) 272-2100.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Jean R. Homere can be reached on (571) 272-3780. The fax phone numbers for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Herng-der Day H.D.  
April 12, 2005

*Thai Phan*  
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